

Report Date: 23 Mar 2015
Summary Report for Crew Drill Drill Task
Drill Number: 07-4-D9277
Drill Title: Remove a Misfire from 81-mm Mortar
Status: Approved
Status Date: 23 Mar 2015

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD6 - This product/publication has been reviewed by the product developers in coordination with the MCoE G2 foreign disclosure authority. This product is releasable to students from foreign countries on a case-by-case basis.

Drill Data

Proponent: 07 - Infantry (Collective)

Drill Type: Crew Drill

Approved:

Obsolete:

Restricted Read: No

Route To TMD Reviewer: No

TMD Concurrence:

TMD Comments:

Safety Level: Low

Conditions:

The squad is conducting a fire mission and the mortar fails to fire. Some iterations of this task should be performed in MOPP 4.

Standards:

The first crewmember that notices the failure of the mortar round to fire announces, "MISFIRE." The mortar squad conducted misfire IAW FM 3-22.90 and the unit standard operating procedures (SOP).

Drill Statements:

DANGER	
NONE	
WARNING	
NONE	
CAUTION	
NONE	

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time

available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. .

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. .

Cue: This drill begins when a crew member notices the failure and announces, "Misfire."

Coaching Point: NONE

TASK STEPS

1. First crewmember that notices the failure to fire announces, "MISFIRE."

2. Entire crew stays with the mortar.

Note: During peacetime live-fire training, all squad members, except the gunner, move at least 50 meters to the rear of the mortar.

3. Gunner moves to the rear of the mortar and kicks the base of the barrel several times.

Note: During peacetime live-fire training, if the round does not fire, the gunner joins the squad and waits one minute before returning to the mortar position.

4. Gunner checks the barrel for heat, bare-handed, with his fingertips to determine if it is cool enough to handle.

5. If the barrel is too hot to handle, the gunner employs field-expedient measures to cool the barrel and then rechecks for heat.

6. As soon as the barrel is cool enough to handle, gunner informs the squad leader.

Note: During peacetime live-fire training, the crew returns to the mortar position.

7. Gunner removes the sightunit and places it in the sight case.

8. Gunner removes the firing pin.

Note: Gunner may depress the barrel to provide easier access to the firing pin.

9. Gunner unlocks the barrel clamp and rotates the barrel, unlocking the breech plug from the socket of the baseplate. He then relocks the barrel clamp.

10. Gunner grasps both ends of the traversing gear assembly and supports the mortar.

11. Assistant gunner places his right hand (palm up) under the blast attenuator device and his left hand (palm down) on top of the blast attenuator device.

12. Ammunition bearer places both hands on the cooling fins under the barrel and raises the barrel to the horizontal position. Gunner is supporting the mortar.

Note: Once barrel is horizontal it should never be lowered until the round is removed.

13. Assistant gunner slips his thumbs over the edge of the muzzle to stop the round as it slides out.

14. Ammunition bearer raises the base of the barrel until the round slides out.

15. Assistant gunner catches the round.

16. Ammunition bearer shakes the barrel to dislodge any remnants from the last round fired. He lowers the barrel into the rotating socket of the baseplate.

17. Assistant gunner removes the round and passes it to the ammunition bearer.

18. Ammunition bearer inspects the round for the cause of the misfire. If the primer of the ignition cartridge is dented, the ammunition bearer tries to replace the safety wire and puts the round in a marked safe location.

19. Gunner replaces the firing pin.

20. Assistant gunner swabs the bore.

21. Gunner replaces the sight and re-lays on the last data given by the squad leader.

22. Ammunition bearer examines the round to determine the cause of the firing malfunction.

Note: Squad takes corrective action based on identified cause of misfire.

(Asterisks indicates a leader performance step.)

TASK MEASURES

1. The crewmember announced, "MISFIRE."
 2. the entire crew stayed with the mortar.
 3. Gunner moved to the rear of the mortar and kicked the base of the barrel.
 4. Gunner checked the barrel for heat.
 5. The gunner employed field-expedient measures to cool the barrel.
 6. The gunner informed the squad leader when the barrel was cool.
 7. Gunner removed the sightunit and placed it in the sight case.
 8. Gunner removed the firing pin.
 9. Gunner unlocked the barrel clamp and rotated the barrel.
 10. Gunner grasped both ends of the traversing gear assembly.
 11. Assistant gunner placed his right hand (palm up) under the blast attenuator device.
 12. Ammunition bearer placed both hands on the cooling fins under the barrel.
 13. Assistant gunner slipped his thumbs over the edge of the muzzle.
 14. Ammunition bearer raised the base of the barrel.
 15. Assistant gunner caught the round.
 16. Ammunition bearer shook the barrel to dislodge any remnants from the last round fired.
 17. Assistant gunner removed the round and passed it to the ammunition bearer.
 18. Ammunition bearer inspected the round for the cause of the misfire.
 19. Gunner replaced the firing pin.
 20. Assistant gunner swabed the bore.
 21. Gunner replaced the sight.
 22. Ammunition bearer examined the round.
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Talk:

a.Orientation: The objective of this squad drill is to provide the squad with basic skills necessary to remove a misfire from a 81-mm mortar.

b.Safety: During peacetime live-fire training, all squad members, except the gunner move about 50 meters to the rear of the mortar.

c.Demonstration: If another squad has successfully performed this drill, have that squad demonstrate it. During the demonstration, explain what is being done and why, using the performance measures as a guide. After the demonstration, summarize the actions performed by the demonstrating squad.

d.Explanation: (1) Refer to the performance measures and explain what the squad leader, gunner, and ammunition bearer is required to do upon hearing "MISFIRE."
(2) Ensure that the squad leader and squad members know their duties and responsibilities pertaining to each portion of the drill.
(3) Ask if there are any questions pertaining to the drill. If so, ensure that all questions are correctly answered before beginning to train the drill.

e.Unit Instructions: a. Resources: 81-mm mortar, ammunition, and all other required Table(s) of organization and equipment (TOE) assigned personnel and equipment.
b. Training Site: A mortar firing range or training area with sufficient mask and overhead clearance.
c. Unit Instructions. The squad is conducting fire missions and the mortar fails to fire. The first crew member that notices the failure of the mortar round to fire announces, "MISFIRE."

Walk:

1. Refer to the performance measures and have each squad member perform his part slowly at first as the leader talks him through.
 2. NONE.
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Run:

a.Run-Through Instructions: The unit should practice this drill until they can perform it according to standard, without using notes. The initial run-through exercise should be conducted slowly. The soldiers should change positions in order to learn all steps and standards.

b.Coaching Point: NONE

c.Performance Instructions: When the soldiers can perform this drill according to the standard, they should be evaluated by the platoon leader or sergeant.

Equipment (LIN)

Step ID	LIN	Nomenclature	Qty
No equipment specified			

Materiel Items (NSN)

Step ID	NSN	LIN	Title	Qty
No materiel items specified				

Support Personnel

Personnel Type	Description	School	Qty	Remarks
No support personnel specified				

TADSS

Step ID	TADSS ID	Title	Product Type	Qty
	07-13A	Mortar, Pneumatic/ M32	DVC	1
	07-13B	Pneumatic Mortar Trainer/ M32A1	DVC	1
	TASC-303-TBD-16	TNG DEVICE, MORTAR, 81MM, MOCK-UP (Local TADSS – Not in TSMATS/PAM 25-30)	TA	1

Supporting Individual Tasks

Step ID	Task ID	Status	Task Title
	071-11C-0100	Approved	Maintain an 81-mm Mortar
	071-11C-0101	Approved	Perform Safety Checks on an 81-mm Mortar
	071-11C-0102	Approved	Lay an 81-mm Mortar for Deflection and Elevation
	071-11C-0104	Approved	Prepare 81-mm Mortar Ammunition for Firing
	071-11C-1000	Approved	Fire a Mortar
	071-11C-1001	Approved	Engage Targets with a 60-mm, 81-mm, or 120-mm Mortar Using Direct Lay
	071-11C-1005	Approved	Store Mortar Ammunition
	071-11C-1006	Approved	Occupy a Mortar Firing Position by a Squad
	071-11C-1200	Approved	Occupy a Mortar Firing Position by a Section
	071-11C-1300	Approved	Supervise a Mortar Platoon

Prerequisite Individual Tasks

Step ID	Task ID	Status	Task Title
No prerequisite individual tasks specified			

Supporting Collective Tasks

Step ID	Task ID	Status	Title
	07-3-3018	Approved	Fire Mortars by Direct Alignment (Section-Platoon)
	07-3-3054	Approved	Fire a Mortar Adjust Fire Mission (Section-Platoon)

Prerequisite Collective Tasks

Step ID	Task ID	Status	Title
No prerequisite collective tasks specified			

Supporting Drill Tasks

Step ID	Drill ID	Status	Drill Title
	07-4-D9339	Approved	Fire a Mortar

OPFOR

Task Number	Title	Status
71-0-0014	Disruption	Approved

REFERENCES

Step Number	Reference ID	Reference Name	Required	Primary
	ATTP 3-21.90	Tactical Employment of Mortars	Yes	No
	FM 3-22.90	Mortars	Yes	Yes

Training Setup

A mortar firing range or training area with sufficient mask and overhead clearance.

Training Facilities

Facility ID	Facility Name	Facility Type
No Training Facilities		

DODIC

DODIC	Name	Qty
No DODIC		

Associated Documents

Media ID	Media Type	Title	Subtitle
No Associated Documents			

GLOSSARY TERMS

Glossary Term	Definition
No glossary terms specified	

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
No acronyms/abbreviations specified	